

## Left Tubal Molar Ectopic Gestation Along With Right Dermoid Cyst Ovary: A Case Report

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**Abstract:** The incidence of hydatidiform moles is 1 per 1,000 pregnancies. Ectopic pregnancy occurs in 20 per 1,000 pregnancies. Thus, the incidence of the ectopic molar gestation is very rare. Hydatidiform moles are abnormal gestations characterized by the presence of hydropic changes affecting some or all of the placental villi. Hydatidiform moles arise as a result of the fertilization of an abnormal ovum.

A dermoid cyst (also called as "mature teratoma") is a sac-like growth that may be present at birth. It contains structures such as hair, fluid, teeth or skin glands that can be found on or in the skin. In some cases, especially when in the ovary, it also contains thyroid or brain tissue. Mature cystic teratomas account for 10–20% of all ovarian neoplasms and are the most common neoplasm in younger patients. It may be complicated by torsion, rupture, chemical peritonitis and malignant change but is rarely complicated by infection.

In this report the patient is a 35 year old female who presented with lower pain abdomen and bleeding per vagina since 3 days.

Date of Submission: 10-09-2018

Date of acceptance: 27-09-2018

### I. Introduction

Hydatidiform moles are abnormal gestation characterized by the presence of hydropic changes affecting some or all of the placental villi. Hydatidiform moles arise as a result of fertilization of an abnormal ovum of which the majority originate within the uterine cavity. The occurrence of a hydatidiform mole within ectopic gestational tissue is rare<sup>(1)</sup>. There are two types of HM: complete or partial, and these differentiate based on clinical presentation, chromosomal pattern, histology, and outcome. Partial HM, as with our case, occurs when the ovum is fertilized by either two sperm or one diploid sperm causing a triploid mole (69XXX, 69XXY, or 69XYY)<sup>(2)</sup>. While ectopic pregnancy and molar pregnancy are not rare events, the combination of the two, an ectopic HM, is an extremely rare event. There have only been a small number of molar ectopic pregnancies reported in the literature with estimates of incidence being around 1.5 in every 1,000,000 pregnancies<sup>(3)</sup>.

Cystic teratomas make up approximately 15-25% of ovarian neoplasms. Almost 10-15% are bilateral. They are composed of well-differentiated derivatives of three germ layers-ectoderm, mesoderm and endoderm<sup>(4)</sup>. Teratomas are classified as either mature or immature types and are often composed of multiple embryologic layers. While the mature type is benign, the immature type is benign with a more aggressive course<sup>(5)</sup>.

### Case Report

The patient was a 35-year-old female who was referred to Gynecological Department, Rajindra Hospital, Government Medical College, Patiala with the complaint of pain abdomen and bleeding per vagina for 3 days. Her gynecologic history was unremarkable. The patient underwent ultrasonography. An ill-defined heterogenous hyperechoic lesion measuring 29.5x31.2 mm in left adnexa was observed suggestive of ectopic pregnancy.

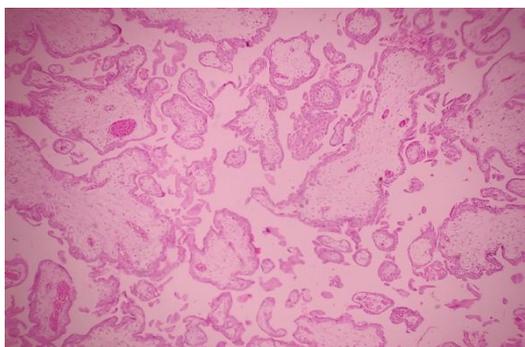
### Gross Features

Sample A labelled as left fallopian tube with gestational sac – Received a greyish white soft tissue piece with cystic area measuring 2.5x2.5cm. Cystic area has friable exterior surface. On cutting clear fluid came out. Hemorrhagic areas seen.

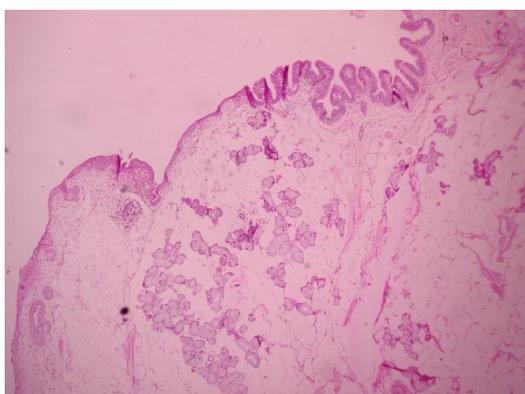
Sample B labelled as right fallopian tube with dermoid cyst – Received an already cut open globular soft tissue piece measuring 4 cm x 3 cm. Cheesy, yellowish white material with hair present inside the cut open cyst and also in the container was seen. The cyst has smooth outer and inner surface. On the inner safe a solid bony hard area identified measuring 1x1 cm. The surface of the bony area showed skin covering with hair follicles. Tube like structure measuring 1 cm in length recovered separately from the container.

### **Histopathological Features**

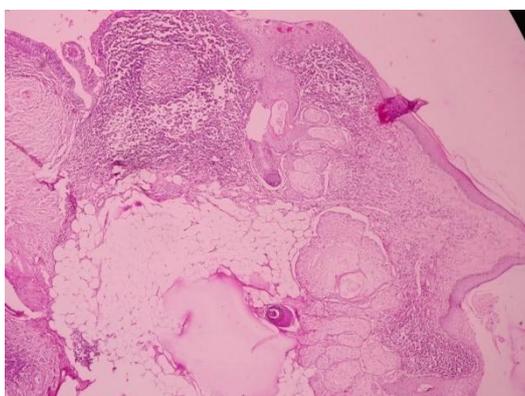
Sample A labelled as left fallopian tube with gestational sac – Multiple sections studied from the cystic areas show well formed chorionic villi lined by syncytiotrophoblast and cytotrophoblast. Few villi were dilated and showed edematous stroma. Some villi were fibrosed. Areas of hemorrhage were also present. Few sections also showed normal fallopian tube lining along with chorionic villi. Histopathological features were those of Partial Hydatidiform Mole. Sample B labelled as right fallopian tube with dermoid cyst – multiple sections studied from the hard area of the cystic specimen showed stratified squamous epithelium. Underneath were seen adipose tissue, muscle tissue, immature neuronal tissue and adnexal structures like hair follicles, sebaceous glands and sweat gland ducts. Stroma also showed lymphocytic infiltration. Few foci of residual ovary were also seen. Multiple section studied from tube like structure showed normal fallopian tube lining. Histopathological features were those of Dermoid Cyst.



**Figure 1:** Section shows well formed chorionic villi lined by syncytiotrophoblast and cytotrophoblast. Few villi were dilated and showed edematous stroma.



**Figure 2:** Section shows mature adipose tissue, mucosal glands and tall columnar cell lining.



**Figure 3:** Section shows stratified squamous epithelium, adnexal structures like hair follicles and sebaceous glands and mature adipose tissue. Stroma shows lymphocytic infiltration.

### **Radiographic Findings and $\beta$ -hCG Level**

Uterus measuring 92 mm x 41 mm x 52 mm in size. No intrauterine pregnancy seen. Right ovary – not visualized, Left adnexa – an ill-defined heterogeneously hyperechoic cystic lesion measuring 29.5 mm x 31.2 mm is seen in the left adnexa. On CRDI vascularity is seen within it. Possibility of ectopic pregnancy Impression: Possibility of ectopic pregnancy  $\beta$ -hCG level: 1.67 mIU/mL

### **II. Discussion**

Theoretically, the same proportion of ectopic pregnancies should also be affected by molar change since the main etiologic factor preceding both partial and complete hydatidiform moles is an abnormal androgenetic chromosomal constitution of the conceptus that is present before implantation regardless of the site<sup>(6)</sup>. The gold standard for diagnosis of HM is through histopathology. Clinical presentation is usually indistinguishable from simple ectopic pregnancy, and diagnosis usually made after laparoscopy or laparotomy upon pathological examination. Careful consideration should be used in distinguishing HM from non-molar hydrotropic villi changes seen in non-molar ectopic pregnancy, as HM has the potential to cause persistent trophoblastic disease and requires careful follow-up and monitoring<sup>(7)</sup>. Although  $\beta$ -hCG levels are elevated in tubal molar pregnancies, they are generally in the lower range, because implantation in the fallopian tube might preclude adequate vascularization, thereby leading to low levels of hCG. There is no distinctive difference in  $\beta$ -hCG levels between molar tubal pregnancies and ectopic pregnancy. Thus, an early ectopic molar pregnancy is not distinguishable from a non-trophoblastic tubal pregnancy on the basis of  $\beta$ -Hcg levels<sup>(8)</sup>.

Mature cystic teratomas, often referred to as dermoid cysts, are the most common germ cell tumours of the ovary in women of reproductive age and are usually asymptomatic until they reach considerable size. Though they are common in reproductive age, but they can occur at any age including the post-menopausal woman. Most are 5-10 cm in diameter when diagnosed and on sectioning they usually contain thick sebaceous material, tangled hair and various dermal structures<sup>(9)</sup>. Gonadal dermoid cysts occur mostly during the reproductive years, between the ages of 20 and 40 years<sup>(10)</sup>. They are frequently multi-cystic and contain sebaceous fluid as well as hair, teeth, bone, and skin. Typically, these tumours contain mature tissues of ectodermal (skin, brain), mesodermal (muscle, fat), and endodermal (mucinous or ciliated epithelium) origin<sup>(11)</sup>

### **III. Conclusion**

The incidence of the ectopic molar gestation is an extremely rare event. The incidence being around 1.5 in every 1,000,000 pregnancies. Among all ovarian tumors mature cystic teratomas are most common types. In this case report we present a female patient with right ovary teratoma and left ectopic molar gestation. The patient was managed surgically. She underwent right salpingo-oophorectomy and left salpingectomy.

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Dr Mohanvir Kaur " 'Left Tubal Molar Ectopic Gestation Along With Right Dermoid Cyst Ovary: A Case Report.' IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 9, 2018, pp 19-21.